Abstract

A Mobile Ad hoc Network (MANET) is a self-organizing, multi-hop wireless network without infrastructure. Most of the research in the area of MANETs focuses on routing protocols. Although routing protocols assume unique node addresses, the question of how to assign them remains open. Addressing is a tough task in MANETs because of its node mobility and lack of infrastructure. An address autoconfiguration protocol for ad-hoc networks not only assigns unique addresses to its mobile nodes but also maintains its address pool efficiently. An addressing protocol assigns a unique address to its mobile nodes with less overhead and delay and also handles the network partitioning and merging effectively. Several address autoconfiguration protocols have been proposed for MANETs. This paper presents the brief description of the addressing protocols in MANETs and their comparison in terms of performance metrics address uniqueness, latency, overhead and scalability.

Index Terms

Computer Science Wireless

Keywords

Wireless networks, Mobile ad-hoc networks, Address autoconfiguration protocols.